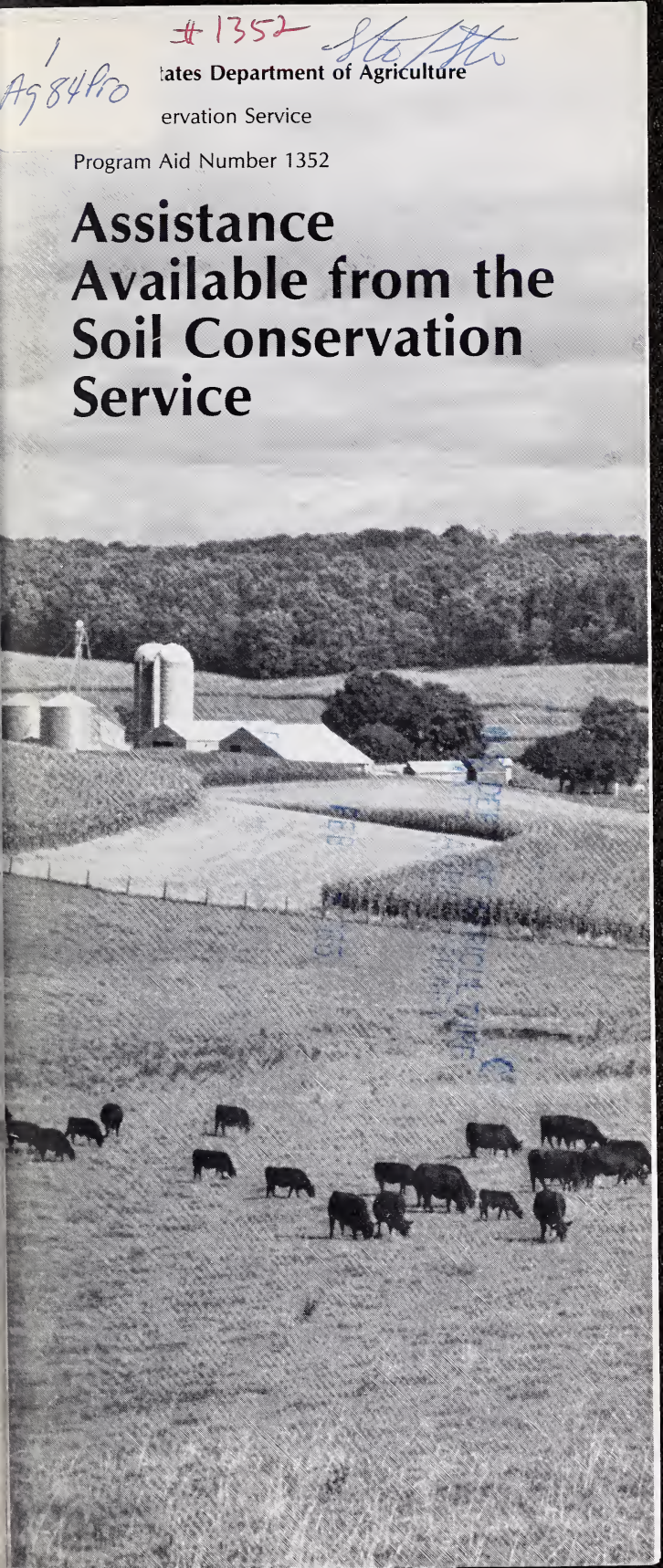


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# Assistance Available from the Soil Conservation Service

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Issued December 1984

## Assistance Available from the Soil Conservation Service

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## Mission of the Soil Conservation Service

The Soil Conservation Service (SCS) helps individuals, groups, organizations, cities and towns, and county and state governments reduce the costly waste of land and water resources and put to good use these national assets. The guiding principle is use and conservation treatment of the land in harmony with its capability and needs.

The SCS mission covers three major areas: soil and water conservation, natural resource surveys, and community resource protection and development. The help SCS provides is technical and in some cases financial, and it is guided by conservation objectives and priorities established by the U.S. Department of Agriculture (USDA) in cooperation with citizen groups, local conservation districts, and other local, state, and federal agencies. SCS also provides some technical assistance to other countries.

To carry out its mission, SCS has a nationwide network of conservation specialists who help people understand and protect their land. The SCS staff includes soil conservationists, engineers, soil scientists, agronomists, biologists, economists, foresters, geologists, landscape architects, plant materials specialists, cartographers, environmental specialists, recreation specialists, social scientists, and archeologists.

SCS focuses its assistance on nonfederal land. Land users get help from SCS mainly through the nearly 3,000 locally organized and locally run conservation districts in the United States. At the district level, SCS soil conservationists provide onsite assistance and call upon all of the agency's expertise to solve specific problems of land users.



## SCS and conservation districts

Conservation districts are local units of government organized by local residents under state law. Districts vary among states: some are subdivisions of state government, some of county government; some follow county borders; and some cover parts of counties or two or more counties.

Under state law, each conservation district is responsible for soil and water conservation work within its boundaries. District governing boards are locally elected or appointed; their job is to plan and carry out long-range programs as determined by the needs for conservation work in their districts. At the request of the district board, SCS assigns a district conservationist and a staff to provide technical assistance to the district and its cooperating land users.

To qualify for many kinds of SCS technical assistance, land users sign a cooperative agreement with the district. Currently, there are more than 2 million district cooperators.

SCS technical assistance through the conservation districts takes many forms:

- Onsite assistance to farmers, ranchers, foresters, and others in planning and carrying out a long-term conservation program that meets their needs and the needs of their land.



*The partnership between SCS and conservation districts is important to the Nation's care of its soil and water resources. Here, an SCS employee shows district board members how a grassed waterway fits into a total management system.*

- Information about alternative land uses and treatments for controlling erosion and reducing sedimentation, conserving water used in agriculture, and preventing flood damage in upstream areas.
- Assistance in designing, laying out, and checking the construction and maintenance of dams, terraces, and other structures; in selecting plant varieties, seeding methods and rates, and cultural practices for establishing grass or trees; and in solving problems that arise in managing cropland, pasture, woodland, wildlife habitat, and other land.
- Information about suitable crops for each kind of soil.
- Assistance in reclaiming abandoned surface-mined coal lands and other disturbed areas.
- Assistance to owners and operators of rural land in controlling nonpoint sources of water pollution.
- Assistance to units of government in inventorying natural resources and planning their wise use.
- Interpretive information on the potential and limitations of different kinds of soil for various uses to help city and county officials, engineers, land use planners, developers, contractors, builders, water quality planners, and others.
- Assistance in planning and carrying out multicounty resource conservation and development programs.
- Assistance in environmental education programs and projects.

For certain conservation measures the district conservationists can also help arrange cost sharing by SCS and other federal agencies.



## Natural resource surveys

Without accurate information on the extent and condition of the Nation's natural resources, a sound national conservation program would be impossible. To provide this information, SCS conducts soil surveys, snow surveys for water supply forecasting in the West, and surveys of other national resources.

### Soil surveys

SCS makes and publishes soil surveys, including maps, of agricultural, forested, and built-up areas. These surveys form the basis of conservation planning. They are the joint effort of SCS, state agricultural experiment stations, and other federal and state agencies participating in the National Cooperative Soil Survey Program. SCS also helps other agencies prepare special maps and reports based on soil surveys.

Each soil survey describes the physical and chemical characteristics of the soils in the survey area—generally a county. It names and classifies the soils according to a nationwide system and provides information on the potential and limitations of the soils for various uses. Detailed maps show where each soil is located. In making the survey, soil scientists determine the soils' texture, structure, chemical composition, depth, slope, degree of ero-



*SCS soil scientist records on an aerial photo the boundaries of soils in a survey area. Field observations and data from laboratory tests and other sources help him to detect variations in soil properties that affect land use and management.*

sion, and other features that affect their response to various uses and various kinds of management.

The published soil surveys and the computerized files of soil survey data are important tools for planning the use and management of land and water resources. They are used by farmers and ranchers; city, county, state, and federal agency personnel; and land use planners, engineers, contractors, developers, builders, and others.

Many city, county, and state governments have provided funds to accelerate soil survey work so that they can make better land use decisions, whether their goal is to build roads or airports, reduce flooding, control sediment, develop housing and industry, protect wildlife, establish parks, or provide other environmental or economic benefits in the area.

Soils on more than 1.5 billion acres—about two-thirds of the Nation's land area—have been mapped, and the work is continuing at the rate of about 50 million acres per year. More than 1,600 soil surveys have been published.

## **Resources inventory**

USDA conducts a program to inventory and monitor national resources in cooperation with other federal, state, and local agencies, as prescribed by Public Law 95-192, the Soil and Water Resources Conservation Act of 1977 (RCA). SCS has leadership of this program.

Through the program, SCS collects data on wind and water erosion, land use, land cover, prime and other important farmland, conservation practices and conservation treatment needs, pastureland and rangeland condition, floodprone areas, wetland systems, critical eroding areas, saline and alkali areas, water areas, windbreaks, riparian areas, forest cover types, and urban and built-up land. SCS also produces seasonal reports on land and crops damaged by wind erosion in 541 counties in the Great Plains. The inventories help USDA appraise the condition of land and water resources and establish a national conservation program, as stipulated in the RCA legislation.

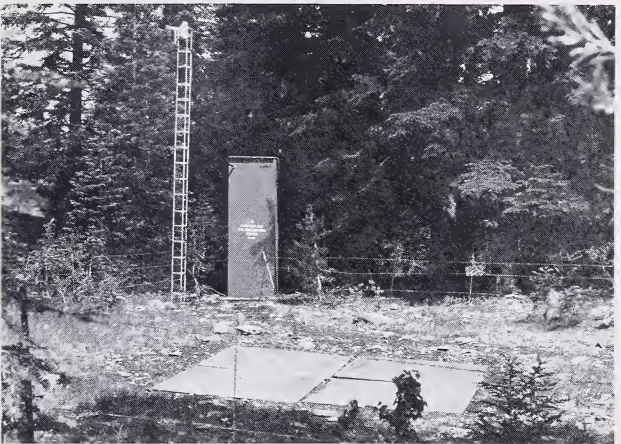
Individuals, citizen groups, and units of government use SCS resource inventory information to make decisions on rural and community development; food, forage, and fiber production; soil and water conservation; rural energy use; retention of important farmlands; wetlands preservation; and environmental improvement.

## Snow surveys and water supply forecasting

In the Western United States, most of the available water—for agriculture, domestic use, industry, and power—comes from snow that falls in the mountains. To find out how much water will be available in summer, snow surveyors from SCS and other agencies collect data from some 1,600 snow courses in the West several times each winter. They determine the depth and the water equivalent of the snowpack and estimate the amount of runoff from the mountain watersheds.

In recent years SCS has developed a network of automated radiotelemetry data sites for collecting snow survey data. This snow survey telemetry (SNOTEL) network provides SCS state offices with information on present streamflow potential. The information is especially valuable during periods of flood or drought.

The information collected by the telemetry system and snow surveyors is translated into water supply forecasts that SCS state offices issue monthly from January to June in cooperation with the National Weather Service. Major sectors of the western economy—agriculture, industry, and recreation—base their plans on these forecasts.



*Bare snow pillows at typical SNOTEL site. The pillows serve as pressure sensors leading to devices that convert the weight of the snow into an electrical reading of the snow's water equivalent.*

## Soil and water conservation

SCS provides technical assistance for conservation work in cropland, pastureland, woodland, rangeland, mined and other disturbed areas, and recreation areas. It also helps landowners and operators conserve, manage, and improve water resources; improve and increase fish and wildlife habitat; and develop aquaculture.

SCS operates or provides technical assistance to 24 plant materials centers that follow a rigorous evaluation procedure to make available new plant varieties useful in conservation work. SCS also helps educators design outdoor classrooms and incorporate conservation ideas into school curricula and teacher training programs.

### Cropland and pastureland

Through conservation districts, SCS conservationists provide information and onsite assistance to farmers on many practices that protect soil and water resources, such as conservation tillage, conservation cropping systems, efficient use of fertilizers, contouring, terracing, stripcropping, and use of crop residues. They also help in managing pasture and hayland, establishing and maintaining grass waterways, treating critically eroding areas, and planning irrigation and drainage as needed.



*Stripcropping and proper grazing management, planned with SCS help, conserve soil and water on this Wisconsin farm.*



SCS agronomists and soil conservationists prepare technical standards and specifications for agronomic practices that fit the local soil, climate, and other physical conditions. They also provide technical assistance in solving special or unique agronomic problems, such as reclaiming surface-mined land for crops or pasture.

## **Rangeland**

More than one-third of the Nation's nonfederal land area is privately owned rangeland, grazable woodland, and native pasture. This land is used mainly to produce forage for livestock. It also provides habitat for many kinds of wildlife, and the vegetation protects rangeland watersheds against erosion.

The objective of SCS on native grazing land is to help the rancher prepare and carry out a conservation plan for grazing use and management. By following this plan, the rancher can maintain or improve the production and quality of vegetation, ensure adequate returns on the investment in land and management, and maintain or improve wildlife habitat, watershed protection, and environmental quality.



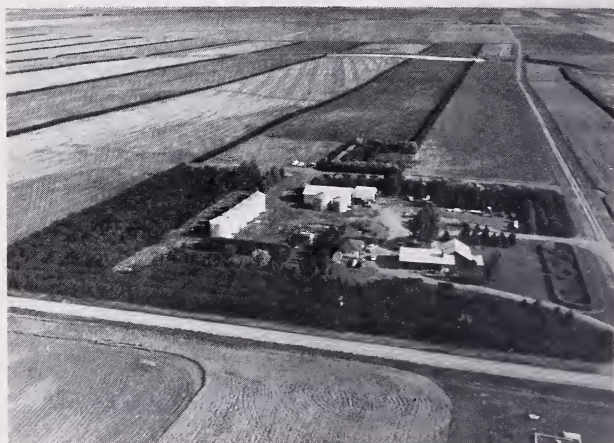
*This SCS range conservationist is helping a rancher prepare a management plan for his livestock operation on the Great Plains.*

SCS range conservationists help ranchers to identify, inventory, and evaluate their soil, water, plant, and animal resources; to choose the kinds of management and treatment that ensure optimum use of the resources; and to apply the planned conservation measures.

## Woodland

Nearly 60 percent of the Nation's commercial forest land is privately owned. SCS foresters and conservationists, in cooperation with conservation districts, assist owners and operators in planning the conservation use of these woodland resources. SCS also provides assistance in planning and applying erosion control measures on these private forest lands. To serve the public more effectively, SCS coordinates its services with those of the Forest Service, state forestry agencies, and others.

As part of the National Cooperative Soil Survey, SCS studies soil productivity to determine the relationship between tree growth and kinds of soil. Soil interpretations for woodland use and management are made, including those for site quality, adapted tree species, erosion hazard, equipment limitations, windthrow hazard, and seedling mortality.



*Windbreaks on this farmstead help to protect the soil from wind erosion and protect the farm buildings from high winds and drifting snow.*



SCS helps land users design, plant, and manage windbreaks to get the optimum benefits of controlling wind erosion, protecting farmsteads and making them more attractive, providing wildlife habitat, and reducing the amount of energy needed to heat or cool buildings.

## **Water resources**

SCS helps plan and design many practices that conserve water or improve water quality. Terracing and stripcropping retain water and snow. Windbreaks trap blowing snow that later melts, providing moisture for plants in spring and summer and contributing to groundwater supplies. Removing excess water in some kinds of soil is also important for sound water management and efficient crop production.

Irrigation is the biggest single consumptive use of water in the United States. To help farmers and ranchers irrigate efficiently, SCS provides technical assistance for improving irrigation systems and management. Soil surveys and snow surveys provide important information on which to base this assistance.

SCS conservationists plan and lay out concrete-lined irrigation ditches to eliminate seepage. They also help land users determine how much water to apply and when and



*Irrigation ditches lined with concrete and fields leveled with laser-guided equipment help to conserve water in the West.*

how to apply it. Improved irrigation systems and management also improve water quality by reducing leaching and runoff.

Toward national goals for water quality, SCS helps land users install conservation practices that control erosion, reduce runoff, and manage wastes. The practices improve water quality by reducing pollutants that can reach waterways—sediment, pesticides, nutrients, organic wastes, salts, leachates from saline soils, and mine tailings.

To help improve water quality, SCS provides technical assistance to farmers, ranchers, and communities in disposing of organic wastes. SCS soil scientists, agronomists, engineers, and other specialists combine their knowledge to find beneficial uses for these wastes so that adverse effects on air, soil, and water are reduced. Well-designed systems for waste management depend on the interaction of soil, plants, micro-organisms, sunlight, and oxygen to break down waste materials and recycle nutrients. SCS helps plan, design, and install systems for managing animal wastes, and it helps communities devise methods for recycling organic wastes through agricultural land.

In the arid West, SCS is working to reduce salinity in rivers, primarily by improving irrigation water management of farms. In the Colorado River Basin, for example, SCS in



*SCS helped reclaim this abandoned strip mine to reduce erosion*

cooperation with USDA's Agricultural Conservation and Stabilization Service is helping plan and install water management and salinity control practices. In Grand Valley, Colorado, and Unita Basin, Utah, practices such as land leveling, concrete-based irrigation ditches, and structures for water control and measurement are helping to improve irrigation efficiency and reduce salt loading of the Colorado River.

## **Disturbed areas**

SCS agronomists and other specialists help plan, establish, and manage vegetation on disturbed or critically eroding areas.

These areas include mined land, coastal sand dunes destroyed by people or the weather, construction sites, gullies, blowouts formed by severe wind erosion, and areas where floods have destroyed streambanks or cut new channels.

Disturbed areas need to be stabilized, vegetated, and protected against further erosion; many can be reclaimed for farming, recreation, or other uses.



*...and restore the usefulness and attractiveness of the site.*

## Fish and wildlife

SCS conservationists and other specialists help farmers, ranchers, and other rural landowners establish and improve habitat for a variety of wildlife, including upland game, waterfowl, and fish. They help urban residents select shrubs and trees that attract songbirds, squirrels, and other wildlife.

Other SCS specialists provide technical assistance to individuals and firms engaged in aquaculture. They evaluate the suitability of the soils as sites for such facilities as ponds, reservoirs, and waste disposal systems, and they help design and lay out ponds and raceways. SCS biologists help land users with fish pond management, including advice on species selection, stocking rates, feeding, and maintaining water quality.

## Environmental education

SCS provides assistance in environmental education primarily by working with state departments of education, colleges and universities, local education agencies, and youth groups.

SCS soil conservationists help school officials and teachers plan outdoor classrooms for environmental studies.



*Mallards on the Eastern Shore of Maryland benefit from well-managed habitat.*



They assist teachers and students who are studying environmental problems, for example, nonpoint source pollution in a local stream. They help teachers find ways to incorporate conservation throughout the school curriculum, for example in courses of geography, economics, political science, and history.

To help teachers establish environmental education programs, SCS participates in workshops and seminars in cooperation with schools, teacher organizations, and other agencies.

SCS assists youth organizations such as Boy Scouts, Girl Scouts, 4-H Clubs, and Future Farmers of America in preparing environmental education programs and community improvement projects. SCS also provides onsite technical assistance in the development and conservation of camp properties.

In cooperation with textbook writers and producers of audiovisual materials, SCS helps incorporate fundamental environmental principles in these works.

## Recreation

The demand for outdoor recreation within reach of population centers has grown rapidly in recent years. SCS and conservation districts are helping meet this growing



*SCS conservationist explains uses and benefits of a homemade compost pile to Boy Scouts at a jamboree.*

demand. For example, small watershed projects and resource conservation and development areas frequently include public facilities for swimming, boating, fishing, picnicking, and camping. Many other conservation measures contribute to recreation, including small ponds and lakes built to increase water supplies on farms and ranches.

Recreation is likely to be part of a multiple-use plan for land and water resources. SCS helps land users plan for recreation on their land just as it helps them plan for crops, livestock, and timber. SCS has leadership in USDA for helping land users develop recreation resources, and it provides liaison with other federal, state, and local agencies that assist in recreation development.

The kind of help that SCS gives depends on the type of enterprise planned by the land users but generally includes—

- Evaluating the suitability of the land for particular recreation enterprises and the conservation measures needed.
- Surveying the soils and determining their suitability for trees, shrubs, and grasses and their limitations for roads, building sites, septic tank absorption fields, water impoundments, trails, playgrounds, camp areas, picnic areas, wildlife habitat, and other uses.



*SCS technical specialists helped local residents plan this manmade lake used for recreation.*



## Plant materials

More than 160 conservation plants released by SCS and cooperating agencies are in widespread use today—the result of continuing efforts by SCS to find plants that can help solve soil and water resource problems.

Conservation plants reduce erosion and sedimentation and help improve water quality in many areas. For example, they help stabilize shorelines, streambanks, and highway embankments; revegetate surface-mined lands; improve soil productivity; provide food and shelter for wildlife and livestock; and control erosion in heavily used recreation areas.

The search for conservation plants began in the mid-1930's, when SCS found that in many places commercially available plants were not effective in controlling erosion. Cooperating with state and other federal agencies, SCS began evaluating native and introduced grasses, legumes, trees, and shrubs for specific conservation purposes.

The first step in the search for conservation plants is to determine the conservation needs and priorities. This is done through SCS state conservationists. For instance, one priority in the Great Plains states is improved varieties of trees for windbreaks.



*Examining smooth cordgrass seedlings at the National Plant Materials Center in Greenbelt, Maryland. Cordgrass is being grown for shoreline stabilization.*

The next step is to assemble and evaluate plants to determine their potential and range of adaptation. To do this, SCS operates or provides technical assistance to 24 plant materials centers around the country.

Scientists at the centers obtain native or introduced plants that show promise for the intended use. They test and compare plant performance in greenhouses and in field trials under actual-use conditions. Then they arrange for commercial production of the plant. The centers do not sell plants and seed, but instead release their selections to commercial nurseries and seed producers. In so doing, the centers work closely with state and other federal agencies, commercial firms, and seed and nursery associations.

Open to the public, the plant materials centers are located in Palmer, Alaska; Tucson, Arizona; Lockeford, California; Meeker, Colorado (Upper Colorado Environmental Plant Center); Brooksville, Florida; Americus, Georgia; Hoolehua, Hawaii; Aberdeen, Idaho; Manhattan, Kansas; Quicksand, Kentucky; Beltsville, Maryland; East Lansing, Michigan; Coffeeville, Mississippi; Elsberry, Missouri; Bridger, Montana; Cape May Court House, New Jersey; Los Lunas, New Mexico; Big Flats, New York; Bismarck, North Dakota; Corvallis, Oregon; Kingsville, Texas; Knox City, Texas; Nacogdoches, Texas; and Pullman, Washington.

## Cost-sharing programs for individual land users

To encourage and assist land users in protecting the Nation's natural resources, USDA offers cost sharing as well as technical assistance. SCS administers or participates in cost-sharing programs that offer special assistance for protecting the Great Plains, installing certain conservation practices, protecting wetlands for migratory waterfowl, reclaiming abandoned surface-mined coal land, and improving water quality.

*Great Plains Conservation Program (GPCP).* This program was authorized by Congress in 1956 primarily to protect the drought-prone Great Plains against wind erosion. SCS administers this program and offers technical assistance and cost-sharing payments under 3- to 10-year contracts to farmers and ranchers installing permanent conservation practices. Cost-share rates range up to 80 percent for needed conservation work.

Top priorities in GPCP are converting land poorly suited to cultivated crops back to grassland, reseeding depleted rangeland, and planting trees for wind protection. Cost-shared practices include stripcropping, terraces, diversions, fences, and stockwater systems. The program also offers assistance in improving recreation resources, promoting economic uses of land, and controlling agriculture-related pollution.

Assistance under GPCP is available to qualifying farmers and ranchers in 519 designated counties in Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming.

*Agricultural Conservation Program (ACP).* This program offers cost sharing for soil, water, and forestry practices of long-term benefit. It is administered by USDA's Agricultural Stabilization and Conservation Service (ASCS). SCS provides technical assistance in determining where conservation practices are practical and necessary, preparing the conservation plans, and designing and laying out the practices. SCS also supervises and certifies proper installation of the practices.

Assistance under ACP is available to farmers, ranchers, and private nonindustrial owners of forest land. The federal government pays up to 80 percent of the cost of needed conservation practices.

*Water Bank Program.* This program is designed to preserve, restore, and improve wetlands as breeding and nesting areas for migratory waterfowl. SCS provides technical assistance in preparing and applying a 10-year conservation plan for the landowner or operator in important waterfowl areas. ASCS administers the funds for cost sharing.

*Rural Abandoned Mine Program (RAMP).* Under RAMP, which was authorized by Congress in 1977, SCS provides technical and financial assistance to landowners signing long-term contracts to reclaim certain abandoned coal-mined lands.

RAMP assistance is available in participating states to people who own or control nonfederal land that has been mined for coal. It is also available to owners of land and water areas affected by abandoned coal mines. Areas must have been abandoned before August 3, 1977, and left unreclaimed or inadequately reclaimed.

The first priority for assistance through RAMP is to protect public health, welfare, safety, and property from hazards caused by past surface coal mining or by surface effects of deep mining. Technical assistance and cost sharing offered through RAMP can be used to reclaim these lands for approved uses including pasture, range, woodland, cropland, noncommercial recreation, and wildlife habitat.

Under RAMP, the federal share of the costs ranges from 25 to 100 percent, depending on the acreage to be reclaimed, the proposed use, and whether the benefits are mainly onsite (private) or offsite (public). The greater the public benefits, the more the government will pay. A single landowner may receive cost sharing for reclaiming up to 320 acres.

## Community resource protection and development

SCS helps communities protect and develop their land and water resources. It helps solve flooding problems, assists when natural disaster strikes, and promotes community development.

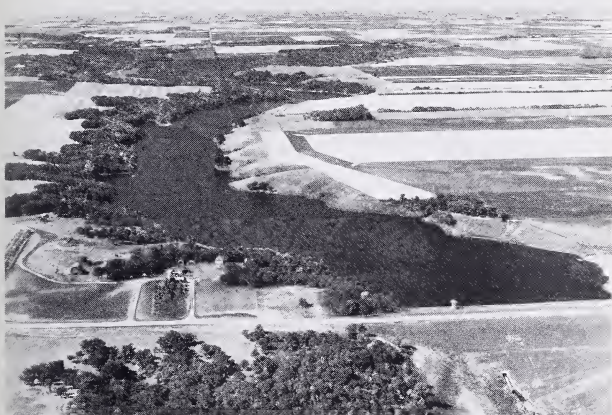
This assistance not only results in better resource management but also produces many social and economic benefits through improvement of community facilities, industrial development, commercial expansion, recreation, and strengthening of small farms.

### Watershed projects

SCS administers watershed projects for the Department of Agriculture under Public Law 83-566, the Watershed Protection and Flood Prevention Act of 1954. These projects help urban and rural communities protect, improve, and develop the water and land resources of a watershed of up to 250,000 acres. PL 83-566 projects can be multipurpose.

Rural and urban residents in hundreds of communities have learned that by working together through watershed projects they can help solve their land use and water problems. They can—

- Reduce erosion, siltation, and flooding.



*Matajeek Dam, a multipurpose PL 83-566 structure in North Dakota, protects people and cropland from flooding and also provides recreation.*



- Supply water for growing domestic and industrial needs.
- Attract new industries.
- Manage water for agriculture.
- Improve fish and wildlife resources.
- Provide opportunities for recreation.
- Recharge ground-water reservoirs.
- Improve and maintain water quality.

Through watershed projects, conservation measures are established on private and public land. Also, dams and other water control structures are built on upstream tributaries to ensure effective water management.

Watershed projects begin with local initiative and responsibility. Local proposals are reviewed by the state, which may make financial and other assistance available. Federal technical and financial assistance is also available.

State agencies and qualified nonprofit local organizations can sponsor a watershed project. Qualified local groups include soil and water conservation districts; municipalities; counties; recreation and park districts; watershed, flood control, conservancy, drainage, and irrigation districts; Indian tribes and tribal organizations; and associations of water users.

The federal government gives technical help in planning and installing the project measures, pays the full cost of construction for flood prevention, and shares the cost for other purposes. To help sponsoring organizations finance their share of the cost, it lends a maximum of \$10 million per project for a maximum of 50 years. To develop water supply for future municipal or industrial use, it can advance funds amounting to a maximum of 30 percent of the costs of a multipurpose reservoir and can defer payment for a maximum of 10 years without interest.

Major obligations of local sponsors are acquiring land, easements, and rights-of-way; awarding contracts for construction on private land or electing to delegate contracting to SCS; and sharing the construction cost of measures if appropriate. Local sponsors also are responsible for operating and maintaining the completed project.

Watershed projects help cities, towns, and rural areas stimulate economic growth. Where projects are developed for multiple purposes, both urban and rural areas benefit. Control of flooding, erosion, and siltation reduces risks in farming and lowers maintenance costs for roads and



bridges. It also reduces reservoir sedimentation and prevents costly flood damage in urban communities.

Reservoirs built in watershed projects provide opportunities for fishing, boating, swimming, and other recreation. They supply water for irrigation, municipal use, and industry. They also help communities attract new industry and accommodate the expansion of existing industry.

A watershed project has an immediate and positive effect on the economy of a rural community and often acts as a catalyst to a wide range of rural development actions.

### **River basin studies and investigations**

Public Law 83-566 also provides broad authority for cooperation between USDA agencies and other federal and state agencies in river basin planning, surveys, and investigations. SCS directs these activities, working closely with the Forest Service.

Conducted at the request of cooperating federal and state agencies, river basin studies and investigations—

- Identify water and land resource problems.
- Analyze the economic base and environmental setting.
- Suggest alternative plans for solving the problems and improving the economy and environment.



*As part of the Palouse River Basin Study in eastern Washington and western Idaho, an SCS conservationist discusses fall field conditions with a landowner. A major objective of the Palouse study was to find alternative ways to reduce the severe erosion on much of the basin's cropland.*

These studies and investigations can help coordinate broad resource development in a river basin. They also help coordinate upstream watershed projects with downstream measures taken to solve problems of water and land use.

These cooperative studies provide information essential for planning alternative solutions to special resource problems. In the Colorado River Basin Salinity Control Program, for example, special studies identify ways to reduce the salinity of return flows from irrigation. From these special studies, plans for improved water management can be prepared that provide several benefits—water conservation, economic efficiency, and rural development—in addition to improved water quality. These studies are performed in cooperation with other USDA agencies, the Bureau of Reclamation, and the Environmental Protection Agency.

SCS conducts flood-plain management studies, which identify the economic, social, and ecological values of flood plains and opportunities for restoring and preserving them. These studies can identify flood-prone areas. At the request of the local community—and with the approval of the appropriate state agency—SCS provides continuing technical assistance after completion of the study.

## **Resource conservation and development areas**

Speeding up resource development and environmental protection in multicounty areas is the aim of the Resource Conservation and Development (RC&D) Program approved by Congress in 1962.

USDA agencies cooperating with SCS help local sponsors—conservation districts, irrigation districts, towns, cities, counties, and others—plan and carry out an RC&D area program. SCS also helps coordinate assistance from state and other federal agencies.

To participate, local sponsors apply to the Secretary of Agriculture with the concurrence of the governor and the SCS state conservationist. If the application is endorsed by the governor and authorized by USDA, SCS may assign an RC&D coordinator to help the sponsors review the problems and opportunities for resource development and environmental protection. From this study a plan of action is prepared. USDA, if it accepts this plan, provides technical and financial aid to help carry it out.

Each RC&D area has its own goals, but most aim to—

- Develop land and water resources for agricultural, municipal, or industrial use and for recreation and wildlife.
- Provide information on better uses of soil and water resources for farming, ranching, recreation, housing, industry, transportation, and other land uses.
- Install conservation measures for critical-area treatment and flood prevention.
- Reduce air and water pollution.
- Speed up conservation work on public land and on individual farms, ranches, and other private holdings.
- Make needed adjustments in land use by encouraging conversion of land to a suitable use, for example, conversion of steep cropland to woodland and wildlife habitat.
- Improve and expand recreation facilities and promote historical and scenic attractions.
- Increase local employment by encouraging existing industries to expand and new ones to locate in the area.
- Improve markets for crops, livestock, and forest products.
- Improve or bring to the area needed community facilities such as hospitals, schools, sewage treatment plants, and roads.
- Encourage training programs to improve job skills.



*Under the RC&D Program, SCS helps many of our Nation's coastal communities protect beaches and dunes with vegetation, such as the American beachgrass shown here, or with erosion-control structures.*

## Land evaluation and site assessment

State, county, and municipal officials face many difficult decisions in choosing land uses that best meet the overall needs and objectives of their communities. Among the most difficult decisions are those concerning the conversion of agricultural land to nonagricultural uses. To help local officials make these decisions, SCS developed the Land Evaluation and Site Assessment (LESA) system.

LESA gives planners a consistent yet flexible system to evaluate land and to determine what conditions justify converting agricultural land to nonagricultural uses. Soil survey information gathered and interpreted by SCS provides technically sound data for the land evaluation part of LESA. For site assessment, local officials identify and rate community development factors that influence the importance of retaining a site in agricultural use.

A local committee oversees the use of the LESA system, ensuring that it reflects local values and community development objectives. LESA, therefore, does not lessen the authority of local officials to make their independent land-use decisions. Rather, it assists them in making those decisions rational, consistent, and sound.



*A county planner and a district conservationist discuss land use plans.*

## **Emergency watershed protection**

SCS provides technical and financial assistance whenever fire, flood, or other natural disaster causes sudden damage in a watershed. To safeguard lives and property, as authorized by the Secretary of Agriculture, SCS undertakes emergency measures to retard runoff and reduce soil erosion and sedimentation.



## International assistance

SCS provides technical conservation assistance around the world through the Agency for International Development (AID), the Food and Agriculture Organization of the United Nations, and the Joint Commission on Economic Cooperation. This assistance is provided through agreements between USDA and agencies such as AID.

SCS conservationists, soil scientists, and other specialists help officials and technicians of other nations to map and inventory their soil resources and to organize conservation programs. They also train them to work with local residents in applying conservation measures. SCS employees serve both short- and long-term assignments in the developing countries.

In addition, each year about 200 students and technicians from developing countries receive conservation training in SCS offices and field locations around the United States.

*For more information about Soil Conservation Service programs and assistance, call or visit the SCS office listed in your local telephone directory under United States Government, Department of Agriculture. Assistance provided by SCS programs is available to all eligible applicants regardless of race, sex, religion, color, or national origin.*



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